REMARKS

In the Office Action mailed October 31, 2006, claims 7, 8 and 24-27 were withdrawn from consideration. Claims 1, 2, 9 and 10 were rejected, claims 4-6 were objected to, and claims 11-23 were allowed. Claims 7, 8 and 24-27 were withdrawn from consideration as being drawn to a nonelected species. Claims 1, 2, 9 and 10 were rejected under 35 U.S.C. §103(a) as being obvious over Jurisch et al. (U.S. Pat. No. 4,972,286) in view of Official Notice taken regarding knowledge in the art. Claims 4-6 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form.

Interview Summary

A telephonic interview was conducted between Examiner Tupper and Austen Zuege, for Applicants, on November 16, 2006. The rejections of claims 1, 2, 9 and 10 were discussed. No agreement was reached regarding the claims discussed.

Allowed Claims

Claims 11-23 were allowed. Applicants acknowledge the allowability of claims 11-23 over the prior art of record.

Claim Rejections - 35 U.S.C. §103(a)

Claims 1, 2 and 9 were rejected under 35 U.S.C. §103(a) as being obvious over Jurisch et al. (U.S. Pat. No. 4,972,286) in view of Official Notice taken regarding knowledge in the art.

In brief, the Jurisch et al. reference and the subject matter of the Official Notice cannot be combined to produce the structure claimed in independent claim 1. It is not possible to arrive at the present invention based on the cited art without some significant modification that is not taught or suggested in either Jurisch et al. or the Official Notice. Therefore, the rejection of independent claim 1 should be withdrawn, as explained in greater detail below.

Previously amended independent claim 1 relates to a transducing head that requires a substrate, a writer having a writer core, a reader, an electrically insulating material, and an electrical

connector for grounding the writer to the substrate. According to independent claim 1, the reader and the writer core must be electrically isolated from one another by the electrically insulating material.

Jurisch et al. discloses forming a thin film magnetic head (10) that performs both reading and writing functions, in other words, the head (10) is a combined read/write (or R/W) head. (Jurisch et al., col. 3, ll. 12-15; FIG. 1). The head (10) is formed upon an electrically conductive substrate (12), but is separated from the substrate (12) by an electrically insulative base coat (36). (Jurisch et al., col. 2, ll. 30-52; col. 4, ll. 1-2; FIG. 1). The head (10) includes a core (14) that is defined by front upper and lower portions (16 and 18) and rear upper and lower portions (26 and 28), with the front and rear portions (16,18 and 26,28) meeting at a via portion (30). (Jurisch et al., col. 2, ll. 35-43; FIG. 1). Two sets of core windings (32 and 34) are located within the core (14). (Jurisch et al., col. 2, ll. 44-59; FIG. 1). A single electrically conductive stud (40) is formed between the via portion (30) of the core (14) and the substrate (12) through the base coat (36). (Jurisch et al., col. 2, ll. 60-65; col. 3, ll. 53-58; col. 5, ll. 3-15; FIG. 1). In operation, the R/W head (10) of Jurisch et al. functions in either a read mode or a write mode, but the structures of the head (10) cannot perform both read and write functions simultaneously. (See Jurisch et al., col. 3, ll. 16-33). Jurisch et al. states that "[d]uring the read operation, . . . noise sources could interfere with the information signals carried in the form of electrical currents in conductors 32 and 34 by masking the information being read from the storage medium." (Jurisch et al., col. 3, ll. 34-52). In order to alleviate those problems during the read mode operation of the head (10), the conductive stud (40) of Jurisch et al. shorts stray capacitance between the core (14) and the substrate (12). (Jurisch et al., col. 3, ll. 53-58).

Official Notice was taken in the Office Action "that utilizing separate, electrically isolated, read and write heads in place of a single R/W head is old and well known." (10/31/2006 Office Action, p. 3). The Official Notice did not encompass any knowledge in the art regarding electrical grounding of components of transducing heads. As such, pursuant to M.P.E.P. §2144.03, Applicants hereby request that a reference be cited in support of the subject matter of the Official Notice, because the scope of the

Office Notice with regard to the electrical isolation of read and write elements and the electrical grounding of any of those components is unclear. It is believed that such a citation will help facilitate prosecution by allowing Applicants to respond more particularly to the points raised in the Office Action.

Jurisch et al. in view of the Official Notice does not teach or suggest each and every element of independent claim 1. Independent claim 1 requires (a) a reader and a writer core that are electrically isolated from each other and (b) an electrical connector that grounds the writer core to the substrate. It should be noted that the language of independent claim 1 requires that the reader and the writer core remain electrically isolated despite the provision of electrical grounding to the writer core.

Jurisch et al. fails to teach or suggest, as required by independent claim 1, a transducing head having (a) electrically isolated reader and writer structures and (b) an electrical connector that grounds the writer core to the substrate. On page 2 of the Office Action it is recognized that Jurisch et al. does not disclose a head having separate reader and writer structures. Furthermore, Jurisch et al. does not teach or suggest reader and writer elements that are electrically isolated.

Moreover, while separate reader and writer heads were generally known in the art, the prior art does not show a transducing head having both (a) electrically isolated reader and writer structures and (b) an electrical connector that grounds the writer core to the substrate. The fact for which Official Notice was taken does not specifically disclose grounding the writer while keeping the writer electrically isolated from the reader. Indeed, as noted above, the Official Notice taken in the 10/31/2006 Office Action does not include any teachings regarding grounding of a transducing head. While the Office Action on page 3 does state that the use of separate, electrically isolated read and write elements allows each element "to be optimized for its specific function," that statement does not establish any teaching or suggestion in the Official Notice regarding the provision of grounding to any part of a transducing head having separate read and write elements.

Neither Jurisch et al. nor the Official Notice provide sufficient motivation to modify Jurisch et al. to arrive at a transducing head configured specifically as recited in independent claim 1. Independent

claim 1 requires (a) electrically isolated reader and writer structures and (b) an electrical connector that grounds the writer core to the substrate. Jurisch et al. discloses a single conductive stud (40) for grounding for a unitary R/W head, in other words, Jurisch et al. discloses the use of a single electrical connector that grounds the structure that functions as a writer and also ground the structure that functions as a reader. Jurisch et al. provides no motivation for the application of a grounding feature to a transducing head having separate reader and writer structures, and therefore is silent as to whether a writer should be grounded in a head having separate read and write elements. If anything, the teachings of Jurisch et al. only suggest that grounding of the combined R/W head is important during the *read* mode. (Jurisch et al., col. 3, ll. 48-58). But that teaching does not indicate that a writer should be grounded in a head having separate read and write elements. Indeed, that teaching is consistent with prior art that teaches distinguishable "reader bleeders" that ground only reader elements while allowing the voltage of electrically isolated writers to float, as discussed at pages 3 and 4 of the present application. In addition, as noted above, the Official Notice does not encompass any teachings regarding grounding. In this regard, neither Jurisch et al. nor the Official Notice teaches or suggests a motivation to provide both (a) electrically isolated reader and writer structures and (b) an electrical connector that grounds the writer core to the substrate.

The teachings of Jurisch et al. and the subject matter of the Official Notice are incompatible in the sense that a combination of those references cannot provide both (a) electrically isolated reader and writer structures and (b) an electrical connector that grounds the writer core to the substrate, without altering the principles of operation or disregarding contrary teachings of either Jurisch et al. or the prior art devices represented by the Official Notice. Because grounding structures cannot readily be applied to both types (combined R/W heads and heads with separate read and write elements), the references must be significantly modified to arrive at the structure recited in independent claim 1. A basis for making those modifications has not been established in the record.

Moreover, possible modifications to Jurisch et al. would not satisfy all of the limitations of independent claim 1. For instance, Jurisch et al. discloses only the use of a single conductive stud (40) that

provides grounding during both read and write modes for a R/W head. In that respect, Jurisch et al. teaches grounding only in the context of electrically linked (i.e., non-electrically-isolated) read and write elements, because the conductive stud (40) is the sole electrical connector that provides grounding to the head during both read and write modes. Even if we assume, solely for the sake of argument, that Jurisch et al. suggests grounding both the reader and writer elements in a transducing head having separate reader and writer elements, that teaching would be one *away* from the read and write elements being electrically isolated. In that sense, Jurisch et al. might suggest separate electrical connectors that connect the reader and the writer to the same substrate (although only a single conductive stud is disclosed by Jurisch et al.), then the reader and writer elements are not electrically isolated any longer because of the common connection to the substrate. Alternatively, if the single conductive stud (40) were to ground both the read and write elements, then the read and write elements would also no longer be electrically isolated. In this respect, the teachings of Jurisch et al. and the Official Notice are at odds with the language of independent claim 1, which requires that the reader and the writer core remain electrically isolated despite the provision of electrical grounding to the writer core. It is that condition that cannot be satisfied by a combination of Jurisch et al. and the Official Notice without some significant change in the way those cited reference operate.

Thus, the prior art of record fails to disclose or suggest each and every limitation of a transducing head according to independent claim 1. The rejection under §103(a) should therefore be withdrawn. Notification to that effect is requested.

Claims 2, 9 and 10 depend from amended independent claim 1, and include all of the limitations of that base claim. Therefore, dependent claims 2, 9 and 10 are likewise allowable over the cited art, and the rejections under §103(a) should be withdrawn. Likewise, is believed that withdrawn claims 7 and 8 should be allowed with independent claim 1, from which they depend. Notification to that effect is requested.

Claim Objections

Claims 4-6 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form.

In view of the foregoing discussion, it is believed that independent claim 1, from which claims 4-6 depend, is now in allowable form over the prior art of record. Thus, the objection to dependent claims 4-6 should be withdrawn. Notification to that effect is requested.

CONCLUSION

In view of the foregoing, all of the pending claims are now in condition for allowance over the prior art of record. The Examiner is invited to contact the undersigned if a telephonic interview would in any way facilitate the prosecution of the present case. The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,

KINNEY & LANGE, P.A.

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